

# On the Relationship between Iranian EFL Learners' Multiple Intelligences and Their Learning Styles

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**Abstract**—The current work reports investigation of the relationship between Iranian EFL learners' multiple intelligence (MI) profiles and their learning styles (LSs). The study also attempts to find out the most and the least dominant learning styles among the participants. The study further examines whether there is any significant difference between genders in using the different types of learning styles. To this end, two questionnaires, a 90-item multiple intelligences questionnaire and a 24-item learning styles questionnaire adapted from Willing (1988), were distributed among 120 Iranian EFL learners (60 males and 60 females) during their class time at the universities of Sistan and Baluchestan, Iranshahr, and Yasuj. In order to find answer to the first research question, the Pearson Correlation analysis showed that there is a significant positive relationship between the different types of multiple intelligences and learning styles in particular and the multiple intelligences and learning styles as general factors. Descriptive statistics was also run and considered communicative type of learning styles as the most dominant type and Authority-oriented learning style as the least dominant learning style type. Finally, the results of an independent-samples t-test analysis revealed that there is only a significant difference between male and female students in using communicative type of learning styles. That is, female students use this type of learning style more than male ones. The data analyses further indicated that there is no significant difference between genders in employing learning styles as a general factor.

**Index Terms**—multiple intelligence profiles, intelligence, learning styles, Iranian EFL learners, gender

## I. INTRODUCTION

Scholars and practitioners all over the world in the field of second language learning are seeking to investigate teaching methods or strategies that may enhance learner achievement. Learners' individual differences are among the many factors that might have direct influence on language acquisition. Individual differences refer to characteristics unique to each individual (Dornyei, 2005). Multiple intelligences and learning styles are considered as factors of individual differences (Ellis, 1985). Gardner (1993) developed a model of natural human talents that is called "Multiple Intelligence model". This model is considered as one kind of learning style models that have been presented in general education and then have been used in language instruction. Gardner asserted that this theory is not limited to culture and discarded the concept of intelligence emphasized in traditional models (Richards & Rodgers, 2001). Multiple intelligence theory (MIT) was proposed by Gardner in a book called *Frames of Mind* in 1983 against the traditional view of intelligence as a fix concept (Baum, Viens, & Slatin, 2005). He severely challenged the validity of intelligence quotient (IQ) scores and emphasized that intelligence is the ability of "problem solving" and "fashioning products" in a concrete situation (cited in Armstrong, 1993). It was a driving new concept claiming the existence of at least seven different intelligences: verbal/linguistic, logical/mathematical, musical/rhythmic, visual/spatial, bodily/kinesthetic, interpersonal, and intrapersonal (Baum, Viens, & Slatin, 2005). Naturalistic and existential intelligences were also added later on. The description of the types of multiple intelligences is given by Moran, Kornhaber, and Gardner (2006, p. 25) below:

- i. Verbal/Linguistic Intelligence: the ability to understand and use spoken and written communication.
- ii. Logical/Mathematical Intelligence: the ability to understand and use logic and numerical symbols and operations.

- iii. Musical/Rhythmic Intelligence: the ability to understand and use such concepts as rhythm, pitch, melody, and harmony.
- iv. Visual/Spatial Intelligence: the ability to orient and manipulate three-dimensional space.
- v. Bodily/Kinesthetic Intelligence: the ability to coordinate physical movement.
- vi. Interpersonal Intelligence: the ability to understand and interact well with other people.
- vii. Intrapersonal Intelligence: the ability to understand and use one's thoughts, feelings, preferences, and interests.
- viii. Naturalistic Intelligence: the ability to distinguish and categorize objects or phenomena in nature.
- ix. Existential Intelligence: the ability to contemplate phenomena or questions beyond sensory data, such as the infinite and infinitesimal.

Every learner has each of the intelligences. That is, the conditions should be provided for students with all types of intelligences as such they would be able to enhance the intelligence types in which they are weak (Moran, Kornhaber, & Gardner, 2006).

In addition to MI as a factor of individual differences, LSs are also correlated with language acquisition. These two factors have sometimes been confused with one another. Yet they are quite different concepts, and the psychological construct of MIT is fundamentally different from that of LSs. Intelligence refers to our psychobiological potential in which certain kinds of information are processed in certain kinds of ways. This is a kind of capacity that exists in each person, and each intelligence type can be used in different domains, but LSs refer to the way individuals perceive information (Krechevsky & Seidel, 1998). Because of their psychological and biological differences, different students learn in many different ways. Some learners are likely to learn in groups; others prefer to learn alone and at home; some learners are likely to experience something and learn it, others may learn it randomly; some learners think carefully and logically in decision making, while others use their feelings for deciding; visually-oriented learners learn best through watching graphs, pictures, and charts; Auditory-oriented learners learn by listening to lectures and reading, etc (Ismail, Raja Hussain & Jamaluddin, 2010). These different ways in which an individual acquires, retains, and retrieves information are called the individual's learning style (Felder & Henriques, 1995). In other words, LSs can be described as the means of perceiving, processing, storing, and recalling attempts in the learning process (James & Gardner, 1995). In order to find the correlation between LS preferences and biographical variables, Willing (1988, cited in Shirani Bidabadi and Yamat, 2010b) investigated a group of 517 learners from more than 30 ethnic groups to explore the possible learning style differences among adult immigrant ESL learners in Australia. The study was based on a questionnaire which asked students about their preferences for specific ways of learning. Based on Their answers, the students were placed into one of the four categories of learning styles: concrete learners (preferences for perceiving and processing information, performing practical tasks), analytical learners (preferences for analyzing and performing activities independently, enjoying grammatical exercises), communicative learners (tendency toward a social learning approach such as listening to native speakers, talking to friends in English and watching television in English), and authority-oriented learners (like their teacher to explain everything to them, tend to have their own textbooks, and write everything in a notebook).

## II. LITERATURE REVIEW

In this section works of researchers performed on the multiple intelligences and learning styles are reviewed.

Seifoori and Zarei (2011) aimed to investigate the relationship between the perceptual learning styles and the multiple intelligence types of Iranian English major sophomores at Islamic Azad University-Tabriz Branch, to explore the type(s) of perceptual learning style(s) which is/are mostly preferred by Iranian EFL sophomores, and to examine the type(s) of intelligence(s) that is/are mostly exhibited by Iranian EFL sophomores. Ninety-four subjects participated in the study (34 males and 76 females). The data analysis revealed that there are some significant relationships between learning styles of Iranian EFL learners and their intelligence types, and the findings also showed that the mostly preferred learning style was kinesthetic, followed by auditory, visual, tactile, group, and individual learning style. Likewise, the analysis revealed that spatial intelligence was the leading intelligence among the students who participated in the study. The least frequently used intelligence was attributed to the musical intelligence.

Hashemi (2009) investigated the relationship between MI and reading comprehension. To meet this end, she selected 122 Iranian undergraduate EFL students from Islamic Azad University of Roudehen. They were asked to take part in an IELTS test and fill out McKenzie's MI questionnaire. The findings showed, by calculating a standardized multiple regression analysis, that kinesthetic and verbal intelligences made the greatest contribution to predict reading ability scores. The descriptive statistics also revealed that the group was strong in the kinesthetic intelligence and was weak in naturalistic intelligence.

To determine the relationship between listening strategies employed by Iranian EFL freshman university students and their LS preferences, Shirani Bidabadi and Yamat (2010b) carried out a study at a university in south of Esfahan. The subjects were 92 females majoring in Teaching English as a Foreign Language course. To identify the students' listening strategies and their LS preferences, the researchers distributed a Listening Strategy Questionnaire adapted from Vandergrift (1997) with 23 items and a Learning Style Questionnaire adapted from Willing (1988) with 24 items among the subjects. The findings showed that there was a moderate significant positive relationship between listening strategies employed by freshman university students and their learning styles, and that these Iranian EFL freshmen

employed meta-cognitive listening strategies the most and socio-affective listening strategies the least. In terms of learning style preferences they considered themselves as communicative learners.

In order to identify the students' learning styles preferences and their implications on teaching and learning as well as the designs of the text books, Shirani Bidabadi and Yamat (2010a) collected the data from a group of 92 Iranian university students who were randomly selected. The data were gathered through a Learning Style Questionnaire. The results revealed that there was no statistically significant difference between the mean scores of male and female students' learning style preferences. An implication of this study was that the teaching style should be matched to students' learning style and that the materials should also suit students' learning preferences.

In order to discover the interrelationship between listening comprehension strategy use and listening proficiency levels, and learners' learning styles, Liu (2008) selected a sample of 101 EFL Taiwanese university students with two structured pencil and paper questionnaires of listening strategy use (O'Malley, Chamot, Stewner-Manzanares, Kupper, & Russo, 1985; Vandergrift 1997) and learning style (Willing 1988; Nunan 1996). After gathering the data, the findings indicated that both listening strategy and learning styles could be a predictor for listening ability since there were statistically significant relationships among these variables. The results showed that the majority of Taiwanese university students in this sample considered themselves authority-oriented learners rather than communicators.

Hayashi and Cherry (2004) conducted a study to identify learning style preferences of Japanese students of English. They distributed a learning style questionnaire, taken from Willing (1988), among a group of 63 Japanese university students (16 males and 47 females). The obtained findings indicated that the Japanese students did not show tendency to use one learning style. That is, they favor some methods of authority-oriented and communicative learning styles simultaneously. The students also showed a dislike for some analytical style methods.

Shuzhen (2005) sought to figure out the effects of listening comprehension strategy uses on learning proficiency of five-year junior college students. To do so, the researcher used a revised questionnaire based on O'Malley and Chamot (1990) to collect the data from 74 subjects (12 males and 62 females). The descriptive statistics illustrated that the differences among the employment of three listening comprehension strategy categories were small. That is, the mean scores of socio-affective, metacognitive, and cognitive strategies were 3.41, 3.37, and 3.32 respectively. The outcome of t-test revealed that females employed greater use of metacognitive strategies than males. The general listening comprehension strategy use was almost the same, but the learning proficiency of females was superior to those of males. The study also showed that the effective learners adopted more listening comprehension strategies than ineffective learners and subjects with living abroad experience employed greater use of cognitive and social-affective strategies.

In conclusion, as mentioned in review of literature, MIs and LSs proved to have some significant relationship with other variables and they also showed no relationship with some others. However, individuals are different from each other and their differences make each of them unique. Thus, individuals have different personality traits, values, beliefs, intelligences, and LSs. Both teachers and students should be aware of these individual differences and consider the relationships of these individual differences with each other and with other variables such as listening strategies so that they can employ appropriate teaching methodologies based on such differences. As reviewed previously, many studies have been done between MIs and LSs with other variables, but no study have investigated the relationship between MIs and LSs. On the other hand, some of these studies have indicated contradictory results both in using the most and the least dominant LSs and the ways male and female learners utilize LSs. Therefore, the present study aims to explore the relationship between MIs and LSs and to examine the most and the least dominant LSs. The study further intends to investigate whether there is any significant difference between male and female learners in using the different types of LSs in particular and LSs in general.

### III. STATEMENT OF THE PROBLEM, PURPOSE, AND SIGNIFICANCE OF THE STUDY

In Iran these two variables are not taken into account considerably, and they are introduced to the learners only with a slight explanation in their course books. Not only Iranian students but also teachers who teach in lower levels of education seem to have little knowledge on these issues. Giving students a paper and pencil test is not helpful in their understanding. Students should be guided and conducted in the ways in which they are strong so that they better use their intelligences and optimal learning will be achieved. By teaching students based on their intelligences and styles, they will be motivated toward learning and optimal learning will be achieved on the part of learners. Of course, there have been some investigations done on MIs and LSs with other variables, but it seems that their findings have not still received as much attention as they should. However, it is hoped that the findings of the present study will be able to pave the way for teachers, curriculum developers/designers and all those who are involved in education to take the obtained results into consideration. The purposes of the present study are three-fold. The first purpose is to figure out the most and the least dominant types of learning styles preferred by the participants of the study. The second one is to investigate the relationship between types of intelligences and learning styles preferences in particular and the multiple intelligences and learning styles as a general factor. The last purpose is to examine the effect of gender on learning style preferences. Based on the aforementioned objectives, the following research questions are raised:

Q1. What are the most and the least dominant learning style preferences among Iranian EFL learners?

Q2. Is there any significant relationship between Iranian EFL learners' different types of multiple intelligences and learning styles in particular and their multiple intelligences and learning styles as general factors?

Q3. Is there any significant difference between Iranian male and female EFL learners in using the different types of learning styles and learning styles as a whole factor?

#### IV. METHODOLOGY

##### A. Participants

The participants of this study were 120 male and female undergraduate students (60 males and 60 females) within the age range of 19 to 24. Forty students were chosen from the university of Sistan and Baluchestan majoring in English Language and Literature, forty from Yasuj University majoring in Teaching English as a Foreign Language, and forty from university of Iranshahr majoring in English Language Translation. The criterion for participant selection was the ease of access and availability.

##### B. Data Collection Instruments and Procedure

The data gathering was administered by means of two questionnaires for this study:

The first instrument was a 90-item MIs questionnaire prepared by McKenzie (1999). This questionnaire consists of 9 sections and 90 items with five-Likert Scale ranging from: 1. Not at all like me, 2. A little like me, 3. Somewhat like me, 4. A lot like me, 5. Definitely me; that covers 9 categories of Gardner's Multiple Intelligences theory. Since, participants were EFL students; the Persian version of the questionnaire was utilized. For validity and reliability indexes, the original English version was translated into Persian then translated back into English by Razmjoo (2008). The validity of the questionnaire was approved by the item-constructors committee, 8 experienced assistant professors in the Department of Foreign Languages and Linguistics at Shiraz University. The overall internal consistency of the questionnaire was determined by Razmjoo (2008) using Cronbach alpha (CA) and it turned out to be 0.89 which is an acceptable and high index of reliability. The overall internal consistency of the questionnaire was rerun by the researchers and the obtained result showed an alpha value of 0.84 implying that it has a relatively high internal consistency.

The second instrument was the adapted and modified version of Learning Style Questionnaire developed by Willing (1988) because according to Ho (1999), it is a rather updated one and the learner's types identified by Willing (1988) and the learning methods mentioned in the questionnaire are more comprehensive, understandable, applicable and relevant to second/foreign language (L2/FL) learning contexts. It involves four categories: Communicative, Concrete, Authority-oriented, and Analytical. Items one to six represent learners who like to learn through watching, listening to native speakers, talking to friends in English (Communicative Learners); items seven to twelve represent learners who like to learn through games, films, cassettes, talking in pairs, utilizing English outside of the classroom (Concrete Learners); items thirteen to eighteen describe learners who prefer their teachers to explain everything to them, have their own textbooks, study grammar, learn by reading, and learn new words by seeing them (Authority-Oriented Learners); and items nineteen to twenty four represent analytical learners who like studying the rules of grammar, studying English books, reading newspapers, studying by themselves, finding their own mistakes, and working on problems set by the teacher (cited in Shirani Bidabadi and Yamat, 2012a).

These questionnaires were distributed among the students during their class time in one session, and they were asked to fill out the questionnaires within 30 minutes.

#### V. RESULTS

##### A. The Results Concerning the First Research Question

The results of the descriptive statistics, using the mean and standard deviation scores of the participants' responses, in Table 1 were used to identify the most and the least dominant type of learning styles the participants preferred.

TABLE 1.  
BASIC DESCRIPTIVE STATISTICS CONCERNING THE TYPES LEARNING STYLES

	N	Minimum	Maximum	Mean	SD
Communicative	120	8	24	<b>18.88</b>	<b>3.972</b>
Concrete	120	11	24	18.13	2.902
Authority	120	8	24	<b>17.84</b>	<b>3.223</b>
Analytical	120	12	24	18.05	2.919

Note. N = Number of participants; SD = Standard Deviation

Table 1 indicates that the most preferred learning style of Iranian EFL learners with the mean score of 18.88 and standard deviation of 3.972 is assigned to communicative type of learning styles. Authority-oriented learning style was found to be the least preferred learning style with the mean score of 17.84 and the standard deviation of 3.223.

##### B. The Results Concerning the Second Research Question

Table 2 demonstrates the correlation coefficients between types of intelligences and learning styles preferences or the multiple intelligences and learning styles as a general factor.

TABLE 2.  
PEARSON CORRELATIONS BETWEEN TYPES OF MULTIPLE INTELLIGENCES AND LEARNING STYLES

MI	LSs	Communicative	Concrete	Authority	Analytical
Linguistic	Pearson Correlation	<b>.414**</b>	<b>.241**</b>	<b>.257**</b>	<b>.254**</b>
	Sig. (2-tailed)	<b>.000</b>	<b>.008</b>	<b>.005</b>	<b>.005</b>
	N	120	120	120	120
Logical	Pearson Correlation	<b>.196*</b>	<b>.182*</b>	<b>.268**</b>	.169
	Sig. (2-tailed)	<b>.032</b>	<b>.046</b>	<b>.003</b>	.065
	N	120	120	120	120
Spatial	Pearson Correlation	<b>.214*</b>	<b>.270**</b>	<b>.262**</b>	<b>.211*</b>
	Sig. (2-tailed)	<b>.019</b>	<b>.003</b>	<b>.004</b>	<b>.020</b>
	N	120	120	120	120
Musical	Pearson Correlation	<b>.259**</b>	.162	.068	.102
	Sig. (2-tailed)	<b>.004</b>	.078	.459	.267
	N	120	120	120	120
Bodily	Pearson Correlation	<b>.275**</b>	<b>.403**</b>	<b>.215*</b>	.159
	Sig. (2-tailed)	<b>.002</b>	<b>.000</b>	<b>.018</b>	.084
	N	120	120	120	120
Interpersonal	Pearson Correlation	<b>.298**</b>	<b>.259**</b>	<b>.192*</b>	.174
	Sig. (2-tailed)	<b>.001</b>	<b>.004</b>	<b>.035</b>	.057
	N	120	120	120	120
Intrapersonal	Pearson Correlation	.156	<b>.225*</b>	.169	.164
	Sig. (2-tailed)	.089	<b>.013</b>	.066	.073
	N	120	120	120	120
Naturalistic	Pearson Correlation	.000	.108	<b>.185*</b>	.176
	Sig. (2-tailed)	.999	.239	<b>.043</b>	.055
	N	120	120	120	120
Existential	Pearson Correlation	<b>.390**</b>	<b>.425**</b>	<b>.381**</b>	<b>.374**</b>
	Sig. (2-tailed)	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>
	N	120	120	120	120
Total	Pearson Correlation	<b>.395**</b>			
	Sig. (2-tailed)	<b>.000</b>			
	N	120			

Note. MI = Multiple Intelligence; LSs = Learning Styles; Sig = Significant; N = Number

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Pearson product moment correlations in Table 2 manifest that there are some significant correlations between each intelligence type and learning styles of Iranian EFL learners; however, for some intelligence types no correlation was found with some of the learning styles. The results in Table 2 indicate that there is a moderate relationship between the linguistic intelligence and communicative learning styles and a low but positive relationship with concrete, authority-oriented, and analytical learning styles at  $p = .00 < .01$  ( $r = .414$ ),  $p = .008 < .01$  ( $r = .241$ ),  $p = .005 < .01$  ( $r = .275$ ), and  $p = .005 < .01$  ( $r = .254$ ) respectively. The logical intelligence is also significantly correlated with communicative, concrete, and authority-oriented learning styles at  $p = .032 < .05$  ( $r = .196$ ),  $p = .046 < .05$  ( $r = .182$ ), and  $p = .003 < .01$  ( $r = .268$ ) respectively, but it shows no correlation with analytical learning styles with correlation coefficient ( $r$ ) of .169 and  $p$ -value of  $.065 > .05$ . The spatial intelligence has also a significant correlation with communicative, concrete, authority-oriented, and analytical learning styles at  $p = .019 < .05$  ( $r = .214$ ),  $p = .003 < .01$  ( $r = .270$ ),  $p = .004 < .01$  ( $r = .262$ ), and  $p = .020 < .05$  ( $r = .211$ ) respectively. The musical intelligence turned out to be only correlated with communicative learning styles with correlation coefficient ( $r$ ) of .259 and  $p$ -value of  $.004 < .01$ , but this type of intelligence does not show any correlation with the other three learning styles; that is, concrete ( $p = .078 > .05$ ,  $r = .162$ ), authority-oriented ( $p = .459 > .05$ ,  $r = .068$ ), and analytical ( $p = .267 > .05$ ,  $r = .102$ ) learning styles. To summarize the results, as it is shown in Table 2, there is a significant correlation between all intelligence types and learning styles except for bodily and interpersonal intelligence types with analytical ( $p = .084 > .05$ ,  $r = .159$ ) and ( $p = .057 > .05$ ,  $r = .174$ ) respectively, intrapersonal intelligence with communicative ( $p = .089 > .05$ ,  $r = .156$ ), authority-oriented ( $p = .066 > .05$ ,  $r = .169$ ), and analytical ( $p = .073 > .05$ ,  $r = .164$ ), and finally naturalistic intelligence with communicative ( $p = .999 > .05$ ,  $r = .00$ ), concrete ( $p = .239 > .05$ ,  $r = .108$ ), and analytical ( $p = .055 > .05$ ,  $r = .176$ ) learning styles.

In general, Table 2 displays a low positive correlation between the overall multiple intelligences and the overall learning styles preferences of Iranian EFL learners with a correlation coefficient of .395 and  $p$ -value of  $.00 < .01$  which indicates that probability is significant at the .01 level.

### C. The Results Concerning the Third Research Question

An independent-sample  $t$ -test was computed to find the answers for questions 3 based on what have been represented in Table 3.

TABLE 3.  
INDEPENDENT SAMPLES T-TESTS FOR GENDER DIFFERENCES IN USING LEARNING STYLES

LSs	Gender	N	Mean	Std. Deviation	t	Sig. 2 tailed
Communicative	male	60	17.93	4.121	-2.663	<b>.009</b>
	female	60	19.82	3.610		
Concrete	male	60	17.63	3.059	-1.909	.059
	female	60	18.63	2.668		
Authority	male	60	17.87	3.239	.085	.933
	female	60	17.82	3.234		
Analytical	male	60	17.97	2.768	-.312	.756
	female	60	18.13	3.083		
Total	male	60	71.52	10.278	-.962	.338
	female	60	73.50	12.227		

It is inferred from Table 3 that there is only a significant difference between male and female students in using Communicative learning style. That is, female students utilize this type of learning style more than male students. It seems that in using the other types of learning styles, female students also employ them more than males, but based on the p-values of the data which are more than the significant level, the differences are not significant ones.

## VI. DISCUSSION

Regarding the first research question, communicative type of learning styles turned out to be the dominant type of learning styles learners applied. This seems to be in line with the findings identified by Shirani Bidabadi and Yamat (2010b) and Hayashi and Cherry (2004), who recognized communicative learning styles as the dominant one. This may be because of the fact that the participants of the studies are English majors and they are more likely to consider English as a means of communication rather than to study it for grammar or other activities of the classroom. The authority-oriented type of learning styles was demonstrated to be the least preferred learning style. It can be inferred that the participants of the present study tend to study independently and overcome their problems on themselves while learning. They may want to be less dependent on their teachers in doing their activities, and may not believe in teacher authority in the class. This finding contradicts with Shirani Bidabadi and Yamat (2010b) and Hayashi and Cherry (2004) who considered analytical learning styles as the least common learning style among students. The finding is in contradiction with what Liu (2008) identified as the most common and least common learning styles. Liu (2008) found authority-oriented type of learning styles as the most dominant one and the communicative type of learning styles as the least dominant learning styles. Generally speaking, it can be said that one general justification that can be made with regard to these differences in the results of the mentioned studies may be related to the learners' level of proficiency. As Heidari Soureshjani and Naseri (2012) realized that proficiency level of learners have a significant impact on learners' learning styles.

The study also proceeded to inspect the relationship between multiple intelligences and learning styles. The obtained results reported that there are some significant positive relationships between learning styles and combination of intelligences in general and types of intelligences in particular. This implies that multiple intelligences have a significant effect on learning styles of the students. Teachers can use such a finding to apply the proper tools to identify the students' learning styles which is compatible with their appropriate MIs to improve academic instruction and achieve optimal learning based on students' needs. The reason of this relationship between some components of MIs and LSs may be attributed to the learners' awareness of those components and using them in the proper time.

Finally, the current study employed an independent-samples t-test to look at the effect of gender on learning styles. The analysed data showed that there was only a significant difference between male and female students in using communicative learning style. That is, female students use communicative learning style more than male ones, no significant difference was found between males and females in utilizing other learning styles. Shirani Bidabadi and Yamat (2010b) demonstrated that there was no statistically significant difference between males and females with regard to their learning styles. This difference in results may be attributed to the number of the participants of the two studies. Contrary to the previous study which included 92 participants (37 males and 55 females), the participants of the current study were 120 students (60 males and 60 females) with equal number of genders. It may also be due to the linguistic change that exists between males and females. That is, females use more formal speech than males; therefore, they give more priority to pronunciation and accent in communication.

## VII. CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

The current work was an attempt to highlight the importance of learners' MIs and their LSs. Rich information was obtained about the relationship between MI profiles and LSs and that learning process can be facilitated by incorporating these variables into the classroom. That is, introducing students' MIs, LSs in educational system could serve as a significant helpful tool to motivate students toward awareness of their potentials to achieve their desired goals in learning. In summary, the current study indicated that students employed Communicative type of learning styles more frequently than other ones. The study also showed that Authority-oriented learning style is the least dominant one among students. Furthermore, the study tried to find the relationship between students' MIs and their LSs. The results

revealed some significant positive relationships between the two variables. The last part of the study demonstrated that female students have more tendencies to use communicative learning style more than male students. It can be referred that the LSs along with the appropriate intelligence can be helpful in achieving successful learning. Students awareness of their potentials in what they do, will have a positive effect on their self-esteem and can provide pathways to success in language learning. Therefore, these two variables should be taken into account in motivating students, setting goals, doing activities appropriate to the students' needs, and developing learning materials, all of which are influential in the learning process of individuals.

The present study investigated the relationship between multiple intelligences and learning styles adapted from Willing (1988). Other researchers may like to scrutinize the relationship between multiple intelligences with other types of learning styles. Similarly, they may also like to find the effect of these two variables on other factors such language skills, reading strategies, and critical pedagogy in the classroom and society. The present study was conducted with EFL students; similar studies can be performed with students of other disciplines.

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#### REFERENCES

- [1] Armstrong, T. (1993). 7 kinds of smart: Identifying and developing your many intelligences. New York: Plume, Penguin Group.
- [2] Baum, S., Viens, J., & Slatin, B. (2005). Multiple Intelligence in the Elementary Classroom: a Teacher's Toolkit. Teachers College Press, 1234 Amsterdam Avenue, New York, NY 10027.
- [3] Dornyei, Z. (2005). The psychology of the language learner: Individual differences in second language acquisition. Mahwah, N.J.: Lawrence Erlbaum.
- [4] Ellis, R. (1985). Understanding second language acquisition. Oxford: Oxford University Press.
- [5] Felder, R. M., & Henriques, E. R. (1995). Learning and teaching styles in foreign and second language education. *Foreign Language Annuals*. Vol. 28(1), 21-31.
- [6] Hashemi, A. (2009). The relationship between multiple intelligences and reading comprehension. *Andishah va Raftar*. Vol. 6(2), 100-110.
- [7] Hayashi, M., & Cherry, D. (2004). Japanese Students' Learning Style Preferences in the EFL classroom. *Bulletin of Hokuriku University*. Vol. 28, 83-93.
- [8] Heidari Soureshjani, K., & Naseri, N. (2012). Perceptual Learning-Style Preferences of Iranian EFL Learners in Relation to Their Proficiency Level. *American Journal of Linguistics*. Vol. 1(4), 70-74.
- [9] Ho, B. (1999). Learning style preferences of students in learning English. Retrieved 15 October 2009, from <http://sunzi1.lib.hku.hk/hkjo/view/10/1000157>.
- [10] Ismail, A., Raja Hussain, R.M., & Jamaluddin, Sh. (2010). Assessment of students' learning styles preferences in the faculty of science, Tishreen University, Syria. *Procedia Social and Behavioral Sciences*. Vol. 2, 4087-4091.
- [11] James, W. B., & Gardner, D. L. (1995). "Learning Styles: Implications for Distance Learning. *New Directions for Adult and Continuing Education*. Vol. 67, 19-32.
- [12] Krechevsky, M., & Seidel, S. (1998). Minds at work: Applying multiple intelligences in the classroom. In R. J. Sternberg & W. M. Williams (Eds.). *Intelligence, instruction, and assessment* (pp. 17-42). Mahwah, NJ: Lawrence Erlbaum.
- [13] Liu, H. J. (2008). A study of the interrelationship between listening strategy use, listening proficiency levels, and learning style. *RARECLS*. Vol. 5, 84-104.
- [14] McKenzie, W. (1999). MI survey [Electronic version]. Retrieved October 9, 2003, from <http://surfaquarium.com/MI/inventory.htm>.
- [15] Moran, S., Kornhaber, M., Gardner, H. (2006). Orchestrating multiple intelligences. [Electronic version]. *Educational Leadership*. Vol. 64(10), 22-27.
- [16] Nunan, D. (1996). What's my style? In Gardner, D. and Miller, L (Eds.). *Tasks for independent language learning*. Alexandria: TESOL.
- [17] O'Malley, J. M., & Chamot, A. U. (1990). Learning strategies in second language acquisition. Cambridge, England: Cambridge University Press.
- [18] O'Malley, J.M., Chamot, A.U., Stewner-Manzanares, G., Kupper, L. & Russo, R.P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language learning*. Vol. 35(1), 21-46.
- [19] Razmjoo, S.A. (2008). On the relationship between multiple intelligences and language proficiency. *The Reading Matrix*. Vol. 8(2), 155-174.
- [20] Richards, J. C., & Rodgers, T. S. (2001). Approaches and methods in language teaching. Cambridge: Cambridge University Press.
- [21] Seifoori, Z., & Zarei, M. (2011). The relationship between Iranian EFL learners' perceptual learning styles and their multiple intelligences. International Conference on Education and Educational Psychology (ICEEPSY 2011).
- [22] Shirani Bidabadi, F., & Yamat, H. (2010b). Learning Style Preferences by Iranian EFL Freshman University Students. International Conference on Learner Diversity 2010.
- [23] Shirani Bidabadi, F., & Yamat, H. (2012a). The Relationship between English Listening Proficiency Levels and Learning Styles. *GEMA Online® Journal of Language Studies*. Vol. 12(4), 1043-1057.
- [24] Shuzhen, X. (2005). Effective Learning Strategies in English Listening Comprehension. South Asian Institute of Technology.

- [25] Vandergrift, L. (1997). The comprehension strategies of second language (French) Listeners: A descriptive study. *Foreign Language Annals*. Vol. 30(3), 387-409.
- [26] Willing, K. (1988). Learning styles in adult migrant education. Australia: NCRC Research Series.

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